

Algebra/Topology Seminar

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NSF

CONVOLUTION PRODUCTS AND EQUIVARIANT K-THEORY OF FLAG VARIETIES

Thursday, March 26, 2020

1:15 p.m. in ES-143

ABSTRACT. The main goal of this talk will be to describe how the connection between Demazure/push-pull operators on the T -equivariant K -theory of the flag variety of a complex, reductive, algebraic group, G , and the natural convolution product on the G -equivariant K -theory of two copies of the same flag variety can be exploited to give a geometric construction of a coproduct in T -equivariant K -theory defined by Kostant and Kumar. This coproduct is a key ingredient used to describe structure constants in T -equivariant K -theory, T -equivariant cohomology, and eventually the singular cohomology of flag varieties.